

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1.-13. (canceled).

14. (previously presented): A method of measuring the textural similarity of images, the method comprising.

automatically determining a statistical dissimilarity ( $d(i, j)$ ) between the images ( $i, j$ );  
and

automatically determining a perceptual dissimilarity ( $\hat{d} |P^{(i)} - P^{(j)}|$ )

between the images; and

automatically determining a textural dissimilarity ( $D(i, j)$ ) based on the statistical dissimilarity ( $d(i, j)$ ) and a function of the perceptual dissimilarity ( $\hat{d} |P^{(i)} - P^{(j)}|$ ) where  $\hat{d}$  is a function whose value is dependant on a range and magnitude of the perceptual dissimilarity,

wherein the textural dissimilarity  $D(i, j)$  is determined according to the equation  $D(i, j) = d(i, j) + \alpha d(i, j)^{\hat{d} |P^{(i)} - P^{(j)}|}$  where  $\alpha$  is a predetermined scaling factor and  $\hat{d}$  is a function defined as:

$$\hat{d}(P^{(i)}, P^{(j)}) = \begin{cases} 0 & |P^{(i)} - P^{(j)}| \leq 1 \\ |P^{(i)} - P^{(j)}| & |P^{(i)} - P^{(j)}| > 1 \end{cases}.$$

15. (previously presented): A method according to claim 14, wherein determining the perceptual dissimilarity ( $|P^{(i)} - P^{(j)}|$ ) comprises:

determining quantitative measurements ( $P^{(i)}, P^{(j)}$ ) of the textural regularity of the respective images ( $i, j$ ); and

determining the difference between said quantitative measurements ( $P^{(i)}, P^{(j)}$ ).

16. (previously presented): A method according to claim 14, wherein the textural dissimilarity ( $D(i, j)$ ) is a value proportional to the statistical dissimilarity ( $d(i, j)$ ) when the perceptual dissimilarity ( $|P^{(i)} - P^{(j)}|$ ) is not larger than a predetermined threshold.

17. (previously presented): A method according to claim 14 wherein the degree of influence of the statistical dissimilarity on the textural dissimilarity ( $D(i, j)$ ) is determined based on the magnitude of the perceptual dissimilarity ( $|P^{(i)} - P^{(j)}|$ ) when the perceptual dissimilarity ( $|P^{(i)} - P^{(j)}|$ ) is greater than a predetermined threshold.

18. (canceled).

19. (previously presented): A computer-readable recording medium storing a computer program for executing a method of measuring the textural similarity of images, wherein the method comprises:

automatically determining a statistical dissimilarity ( $d(i, j)$ ), between the images ( $i, j$ );

and

automatically determining a perceptual dissimilarity ( $|P^{(i)} - P^{(j)}|$ )

between the images and

automatically determining a textural dissimilarity ( $D(i, j)$ ) based on the statistical dissimilarity ( $d(i, j)$ ) and a function of the perceptual dissimilarity ( $\hat{d}(|P^{(i)} - P^{(j)}|)$ ) where  $\hat{d}$  is a function whose value is dependant on a range and magnitude of the perceptual dissimilarity

wherein the method comprises determining said textural dissimilarity  $D(i, j)$  in accordance with the equation  $D(i, j) = d(i, j) + d(i, j)^{\alpha \hat{d}(|P^{(i)} - P^{(j)}|)}$ , where  $\alpha$  is a predetermined scaling factor and the function  $\hat{d}$  is defined as:

$$\hat{d}(|P^{(i)} - P^{(j)}|) = \begin{cases} 0 & |P^{(i)} - P^{(j)}| \leq 1 \\ |P^{(i)} - P^{(j)}| & |P^{(i)} - P^{(j)}| > 1 \end{cases}$$

20. (canceled).

21. (previously presented): An apparatus for measuring the textural similarity of images, the apparatus comprising:

means for automatically determining a statistical dissimilarity ( $d(i, j)$ ) between the images ( $i, j$ ); and

means for automatically determining a textural dissimilarity ( $D(i, j)$ ) based on the statistical dissimilarity ( $d(i, j)$ ) and a function of the perceptual dissimilarity ( $\hat{d}(|P^{(i)} - P^{(j)}|)$ ) where  $\hat{d}$  is a function whose value is dependant on a range and magnitude of the perceptual dissimilarity

wherein the means for determining the textural dissimilarity  $D(i, j)$  is configured to determine the textural dissimilarity  $D(i, j)$  according to the equation  $D$

$(i, j) = d(i, j) + \alpha \hat{d}(|P^{(i)} - P^{(j)}|)$ , where  $\alpha$  is a predetermined scaling factor and  $\hat{d}$  is a function defined as:

$$\hat{d}(|P^{(i)} - P^{(j)}|) = \begin{cases} 0 & |P^{(i)} - P^{(j)}| \leq 1 \\ |P^{(i)} - P^{(j)}| & |P^{(i)} - P^{(j)}| > 1 \end{cases}.$$

22. (previously presented): An apparatus according to claim 21, wherein the means for determining the perceptual dissimilarity ( $\hat{d}(|P^{(i)} - P^{(j)}|)$ ) comprises:

means for determining quantitative measurements ( $P^{(i)}, P^{(j)}$ ) of the textural regularity of the respective images ( $i, j$ ); and

means for determining the difference between said quantitative measurements ( $P^{(i)}, P^{(j)}$ ).

23. (previously presented): An apparatus according to claim 21, wherein the means for determining the textural dissimilarity ( $D(i, j)$ ) is configured to determine the textural dissimilarity ( $D(i, j)$ ) as a value proportional to the statistical dissimilarity ( $d(i, j)$ ) when the perceptual dissimilarity ( $|P^{(i)} - P^{(j)}|$ ) is not larger than a predetermined threshold.

24. (previously presented): An apparatus according to claim 21, wherein the means for determining the textural dissimilarity ( $D(i, j)$ ) is configured to control the degree of influence of the statistical dissimilarity on the textural dissimilarity ( $D(i, j)$ ) in dependence on the magnitude of the perceptual dissimilarity ( $|P^{(i)} - P^{(j)}|$ ) when the perceptual dissimilarity ( $|P^{(i)} - P^{(j)}|$ ) is greater than a predetermined threshold.

25.-33. (canceled).